Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy

Proposed Action: Chewuch River Mile 4.6 Habitat Enhancement Project

Project No.: 2009-003-00

Project Manager: Tori Bohlen, EWU - 4

Location: Okanogan County, WA

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.20 Protection of cultural resources, fish and wildlife habitat

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to fund Yakama Nation Fisheries (YN) to enhance instream and off-channel rearing habitat for juvenile Endangered Species Act (ESA)-listed endangered Upper Columbia spring Chinook salmon (*Oncorhynchus tshawytscha*), threatened summer steelhead (*Oncorhynchus mykiss*), and bull trout (*Salvelinus confluentus*) between river mile (RM) 4.2 and 5.0 of the Chewuch River on Washington Department of Fish and Wildlife (WDFW)-managed land in Okanogan County, Washington.

A detailed description of the project components follows.

Floodplain Enhancement

A 1,300-foot-long side channel would be constructed between bends in the Chewuch River to the east to improve off-channel habitat. This would involve clearing about 6,200 cubic yards (cy) of material, of which about 400 cy would be backfilled during log burial. The remaining excess material would be removed from the site. The total area of disturbance would be just over one acre. The channel would run through and remain on the WDFW parcel.

Scour pools would be excavated into the bank of the new side channel, and logs would be installed over the pools with roots extending into the pool for fish habitat: lower wood to provide low-flow cover; and higher wood to provide complexity, and promote scour for pool maintenance.

Log Structure Placement

To improve main channel habitat suitability and stability, log structures would be placed at the inlet of the new side channel; within the new side channel; and along the riverbank of the Chewuch River. In addition to using trees and shrubs salvaged during side channel construction, logs with roots would be imported to provide optimal habitat and maintain scour at constructed pools.

Inlet Log Structure. A constructed bar-apex log structure would form and maintain the side channel inlet. This structure would extend into the mainstem. The inlet log structure would involve excavation of about 400 cy of material to create a pool. The log structure would be partially buried within the bank and extend into the pool. This would be followed by backfill of about 170 cy and disposal of about 230 cy. A 100-foot cofferdam would be constructed around the inlet prior to placing the log structure.

Side Channel Log Structures. Approximately 10 large wood structures would be placed within the newly-constructed side channel using about 20 salvaged trees and 70 logs with roots.

Riverbank Log Structure. Another log structure would be placed approximately 200 feet downstream of the side channel inlet to enhance adult holding and juvenile rearing. This location is at an existing pool where the bank is relatively clear of existing trees, affording area to partially bury the log structure without removing trees. The access route to this site would thread through the trees to limit disturbance. All removed shrubs would be salvaged and incorporated into the log structure as slash. An about 90-foot cofferdam would be constructed prior to placing the log structure. The riverbank log structure would involve excavation of about 400 cy of material to create a pool. The log structure would be partially buried, followed by backfill of about 300 cy and disposal of about 100 cy.

Riparian Revegetation

Disturbed areas would be reseeded with native grasses and shrubs. Trees would be avoided to the extent possible; however, some trees would still need to be removed. All removed trees and shrubs would be salvaged and used to enhance stream habitat or floodplain roughness. Native species would be planted in all disturbed areas to promote riparian function, increase food production, and improve habitat complexity for target species. All of the post-construction planting would be done by hand.

The project site would be accessed from Red Dog Lane via a private driveway to the south of the WDFW parcel. From there, an abandoned road alignment would be followed along the top of the terrace to where it descends to the floodplain. Some earthwork would be required to provide safe and stable access on the steep slope from terrace to floodplain. On the floodplain, the access route would traverse about 40 feet and then connect to the channel construction limits. Once in the channel limits, disturbance would be by 'inside-out construction' techniques that utilize the channel excavation boundary as the access route.

About 200 feet of barbed wire fencing would be removed from the edge of the private property boundary at the southeast corner of the project area in order to reach the staging area and access equipment. The fence and gate would be replaced when the project is complete.

Site disturbance would be kept to a minimum by keeping construction access largely within the footprint of the side channel. Disturbance would be limited to access routes, the side channel footprint, and extents of log burial. The main staging and stockpile area would be on the terrace where materials could be temporarily stockpiled and transferred between road haulers to/from off-road trucks. Excavation and hauling would largely remain within the side channel limits, working back to the main access point. The access route to the mainstem log structure site would be along an alignment that minimizes impacts to existing trees. Construction would occur between July 1st and July 31st during in-water work window period for the Chewuch River.

Funding the proposed activities fulfills commitments under the 2020 National Marine Fisheries Service Columbia River System Biological Opinion (2020 NMFS CRS BiOp). These actions would

support conservation of ESA-listed species considered in the 2020 ESA consultation with the United States Fish and Wildlife Service on the operations and maintenance of the Columbia River System, while also supporting ongoing efforts to mitigate for effects of the FCRPS on fish and wildlife in the mainstem Columbia River and its tributaries pursuant to the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act) (16 U.S.C. (USC) 839 et seq.).

Findings: In accordance with Section 1021.410(b) of the Department of Energy's (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, Jul. 9, 1996; 61 FR 64608, Dec. 6, 1996, 76 FR 63764, Nov. 14, 2011), BPA has determined that the proposed action:

1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.

/s/ Mandy Hope
Mandy Hope
Contract Environmental Protection Specialist
ACS Professional Staffing

Reviewed by:

/s/ Chad Hamel
Chad Hamel
Supervisory Environmental Protection Specialist

Concur:

/s/ Katey C. Grange *June 1, 2021*
Katey C. Grange Date
NEPA Compliance Officer

Attachment(s): Environmental Checklist

Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

Proposed Action: Chewuch River Mile 4.6 Habitat Enhancement Project

Project Site Description

The project area sits at an elevation of about 2,000 feet. The floodplain within the project reach is bounded by glacial outwash terraces that vary in height between 30 feet (west) and 120 feet (east). The alluvial channel within the project reach continues to actively migrate across the valley floor. Gravel bar surfaces are composed of cobble with sand deposits on the edges. The Chewuch River channel within the project area was historically relatively straight, indicating several meander bend cutoffs that may have occurred prior to 1895. Since then, meander bend formation and associated channel length have increased. Riparian clearing/thinning associated with cattle grazing occurred directly west of the project area in the 1940s, where a segment of riparian zone was cleared for agriculture and development. A 100-year regional flood occurred in 1948 and likely created much of the initial lateral bank migration and bar forms observed in aerial photographs from 1968. Areas disturbed by meander migrations have since revegetated primarily with alder (*Alnus*) and cottonwood (*Populus*). An existing wetland is present to the east of the proposed side channel.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No with Conditions

Explanation: BPA submitted a determination of No Historic Properties Affected under Section 106 of the National Historic Preservation Act (BPA Cultural Resources Project Number WA 2020 091) on September 2, 2020. Consulting parties included the YN, the WDFW, the Washington Department of Archaeology and Historic Preservation (DAHP), and the Confederated Tribes of the Colville Reservation (CCT). BPA received concurrence from the WA DAHP on September 3, 2020 and the CCT on September 10, 2020. No other responses were received as part of BPA's consultation efforts.

Notes:

- BPA would provide the YN with an Inadvertent Discovery Plan (IDP) in the event of an unexpected archaeological discovery.

2. Geology and Soils

Potential for Significance: No

Explanation: The Chewuch River channel is composed primarily of sand, gravel, cobble and relatively rare boulders. The side channel would be designed to function at all flows greater than typical summer low-flow. Side channel slope and shape would be designed to transport sand and small gravel, which are abundant and frequently transported sediments in the Chewuch River. The inlet condition would be configured to encourage scour, maintaining the inlet by discouraging deposition and sustaining low-flow connection to

surface water. Ground disturbance during construction would be temporary and stabilized with post-construction revegetation. No long-term adverse effects are expected.

3. Plants (including Federal/state special-status species and habitats)

Potential for Significance: No

Explanation: There are no ESA-listed or sensitive plant species present in the project area. Short-term negative impacts to vegetation from heavy equipment use would result in soil being turned and plants being uprooted, buried, or torn apart. The project is designed to minimize impacts to native vegetation. Riparian vegetative communities would be restored through seeding and planting native species in disturbed areas following project implementation. The project would have short-term effects on vegetation from construction actions, but in the long term, there would be beneficial effects including increased riparian habitats and restored or improved vegetative conditions.

4. Wildlife (including Federal/state special-status species and habitats)

Potential for Significance: No

Explanation: The project area has the potential to contain habitat for ESA-listed Canada lynx (*Lynx canadensis*), gray wolf (*Canis lupus*), and yellow-billed cuckoo (*Coccyzus americanus*) (USFWS Information for Planning and Consultation (IPaC), 2021), but based on habitat characteristics and species distribution, the project would have no effect on ESA-listed species. There would be no effect to other sensitive wildlife species.

Wildlife may be temporarily disturbed by human presence (sound, movement, shadows) and vegetation removal. These effects would be short term. Improved habitat conditions would result in long-term positive impacts, including increased plant species richness and diversity, increased habitat structural diversity, and increased habitat heterogeneity.

5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

Potential for Significance: No with Conditions

Explanation: The Chewuch River is designated Critical Habitat for bull trout, steelhead, and Chinook salmon. BPA performed a technical and functional review of the project designs and approved them on October 11, 2019. ESA consultations with NMFS and the USFWS on BPA's Habitat Improvement Program (HIP) were completed on January 11, 2021 (PNF #2021017). The proposed action would result in long-term positive impacts to ESA-listed species and other local fish species by providing complex off-channel habitat for all fish species during all flow conditions. Work area isolation would be used in areas with water; no direct effects to salmonids as a result of construction are anticipated. Fish salvage, which could cause a direct effect to fish, would be performed prior to establishing the temporary cofferdams for the side channel excavation.

Notes:

- YN would adhere to the conservation measures required under the ESA consultations with NMFS and the USFWS on BPA's HIP to minimize impacts to bull trout, Chinook, and steelhead during project implementation (HIP Activity Categories 2a, 2d, and 2e). These measures include isolating work from waters occupied by ESA-listed fish, designing large wood placements to mimic natural processes and functions, and using a licensed engineer to design large wood installation.

6. Wetlands

Potential for Significance: No

Explanation: Jurisdictional wetlands are present to the east of the project area, but the proposed action would not impact wetlands. Sediment barriers would be installed and maintained for the duration of the project. Temporary erosion control measures could include fiber wattles, silt fences, jute matting, wood fiber mulch and soil binder, or geotextiles and geosynthetic fabric. Following construction, the site would be stabilized with post-construction revegetation and temporary erosion control measures would be removed.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: The placement of log structures in the channel may result in minor impacts to groundwater by encouraging greater amounts of water onto the floodplain during high flows. The long-term increase in floodplain access would benefit groundwater recharge and function.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: There are no known special uses for the property. Existing land use would not change as a result of the project.

9. Visual Quality

Potential for Significance: No

Explanation: There would be minimal impact to visual quality as a result of the project as the project would contribute to the natural appearance of the property.

10. Air Quality

Potential for Significance: No

Explanation: Equipment emissions and upturned dust would result in short-term impacts to air quality. These would be temporary and localized in nature and would not have long-term impacts on air quality. Implementation of the proposed action is not expected to generate long-term or short-term violations of state air quality standards.

11. Noise

Potential for Significance: No

Explanation: The use of heavy equipment during project implementation would result in temporary, localized noise increases. These increases would not substantially impact the surrounding environment.

12. Human Health and Safety

Potential for Significance: No

Explanation: The potential health and safety risks to workers and the public during construction would not be greater than a standard construction project and would be short-term.

Adequate signage and other routine safeguards for worker and public safety would be applied to minimize these effects.

Evaluation of Other Integral Elements

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.

Explanation: N/A

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation: N/A

Disturb hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases.

Explanation: N/A

Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

Explanation: N/A

Landowner Notification, Involvement, or Coordination

Description: The project would take place entirely on WDFW-managed land. Adjacent private property would be used to access the project site. YN has coordinated with WDFW during project development and with the adjacent landowner via phone, email and in-person meetings about removing/replacing the fence (necessary for site access), dust control, and equipment inspection, storage, and removal.

Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

Signed: */s/ Mandy Hope* *June 1, 2021*

Mandy Hope, ECF - 4 Date

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